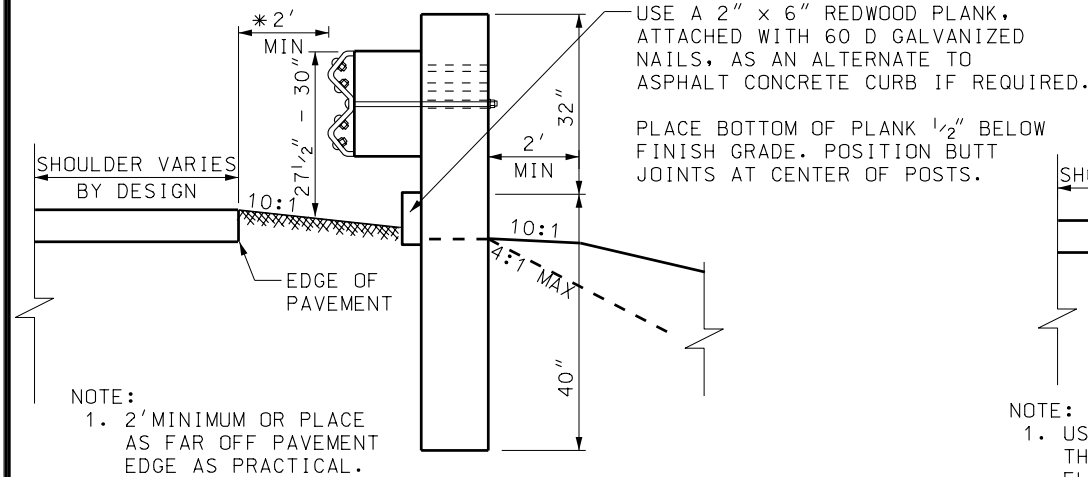
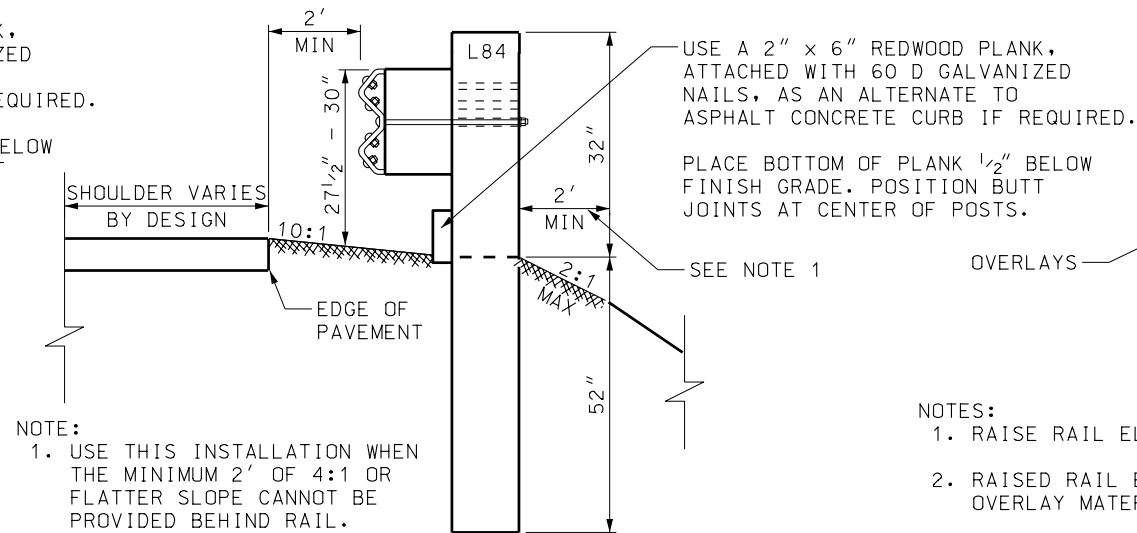


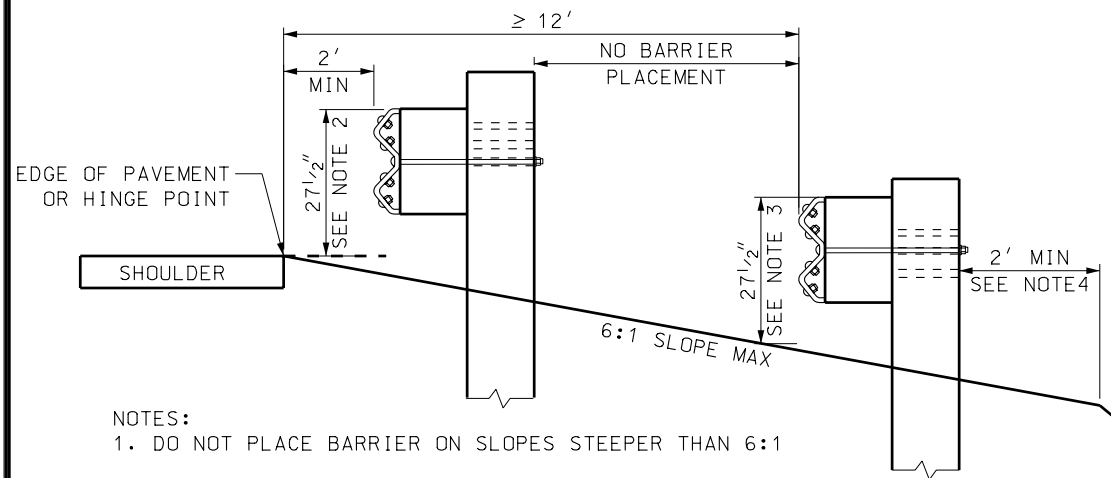
18-DEC-2006 DGN File: L:\Standard Drawings\Impervial\2005\Approved\Change8\Approved\ba4E.dgn



INITIAL INSTALLATION
USE 72" LONG POSTS

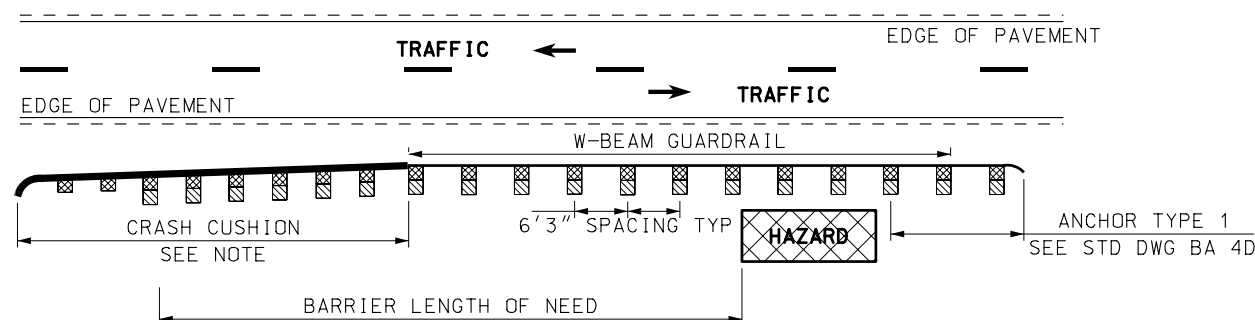


INITIAL LONG POST INSTALLATION
USE 84" LONG POSTS



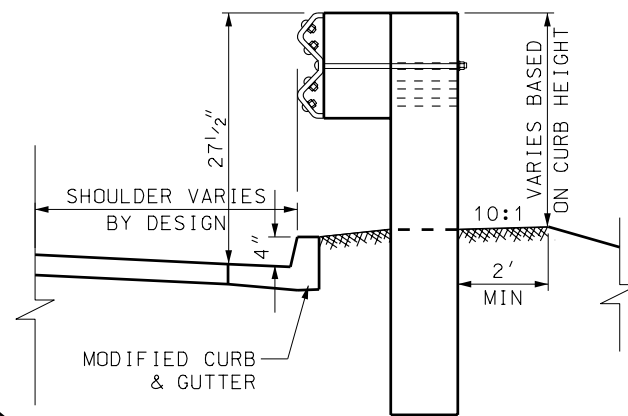
- NOTES:
- DO NOT PLACE BARRIER ON SLOPES STEEPER THAN 6:1
 - MEASURE RAIL HEIGHT FROM SHOULDER LINE OR HINGE POINT EXTENDED. USE BOTTOM BOLT HOLE FOR BLOCK AND RAIL ATTACHMENT.
 - MEASURE RAIL HEIGHT FROM GROUND LINE WHEN BARRIER IS PLACED 12 FEET OR GREATER FROM EDGE OF SHOULDER. USE CENTER BOLT HOLE FOR BLOCK AND RAIL ATTACHMENT.
 - USE 84 INCH POST IF THE 6:1 SLOPE CANNOT BE MAINTAINED 2 FEET BEHIND THE LINE POSTS.

BARRIER INSTALLATION ON 6:1 SLOPE

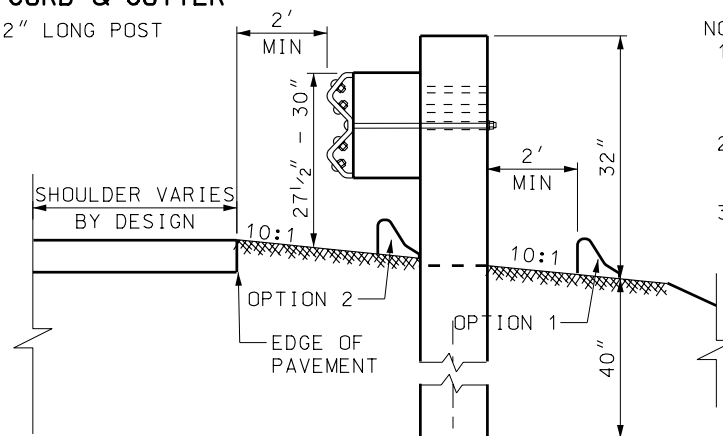


- NOTE:
- CRASH CUSHION REQUIRED WHEN BARRIER END IS WITHIN 1.2 TIMES AASHTO ROADSIDE DESIGN GUIDE CLEAR ZONE.

TYPICAL INSTALLATION

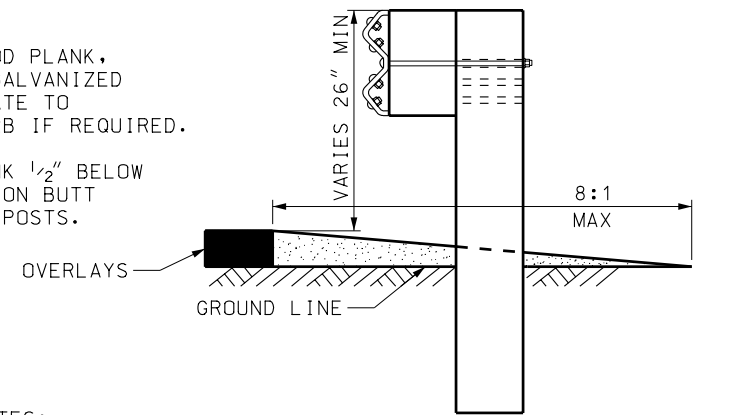


INSTALLATION W/MODIFIED
TYPE B1 CURB & GUTTER
USE 72" LONG POST



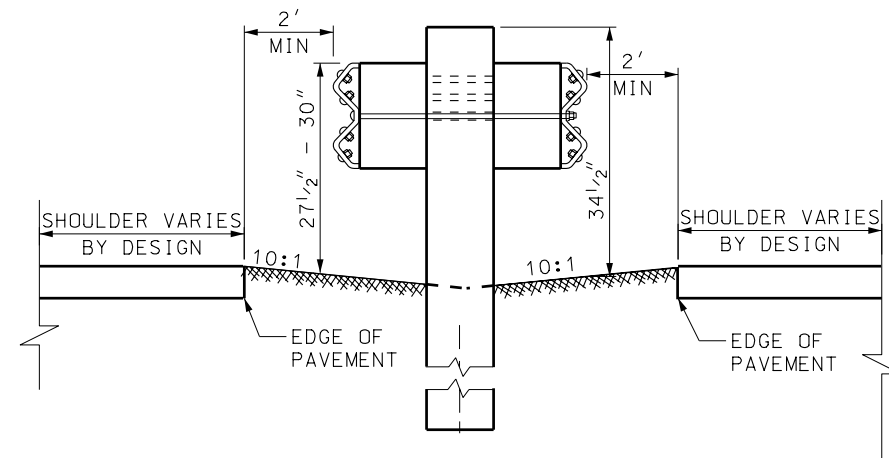
- OPTION 1: PREFERRED INSTALLATION.
- OPTION 2: PLACE FACE OF ASPHALT CONCRETE CURB BEHIND FACE OF RAIL. 2" MAXIMUM CURB HEIGHT WHEN USED IN FRONT OF POST.

INSTALLATION
W/ASPHALT CONCRETE CURB



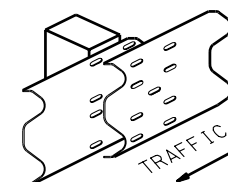
- NOTES:
- RAISE RAIL ELEMENT WHEN OVERLAY IS REQUIRED.
 - RAISED RAIL ELEMENT WILL ACCOMMODATE 6" TO 8" OF OVERLAY MATERIAL.
 - SLOPE OF SHOULDER INTO FACE OF RAIL NOT TO EXCEED 8:1.
 - RAISE REDWOOD PLANKING WHEN REQUIRED.
 - RAISING THE RAIL ELEMENT TO MAXIMUM HEIGHT REQUIRED BEFORE THE MINIMUM HEIGHT OF THE RAIL ELEMENT ABOVE GROUND LEVEL CAN BE REDUCED TO THE MINIMUM OF 25".

RAIL ELEMENT RAISED



- NOTES:
- IF MEDIAN BARRIER IS PLACED 10' OR GREATER FROM TRAVEL LANES USE TOP HOLE TO MOUNT BLOCK & RAIL.
 - RAISE BOTH RAIL ELEMENTS AS PER RAIL ELEMENT RAISED DETAIL, WHEN REQUIRED.
 - ATTACH REQUIRED DELINEATION ON THE POST.

MEDIAN BARRIER



SPLICE LAP DETAIL

W-BEAM GUARDRAIL INSTALLATIONS		UTAH DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION SAINT JACQUES DIVISION		REVISIONS	
STANDARD DRAWING TITLE		RECOMMENDED FOR APPROVAL		1	11/30/06
CHAIRMAN, STANDARDS COMMITTEE		DATE			G.S.
TECHNICAL DIRECTOR		DATE			ADDED NOTE UNDER CURB AND GUTTER DETAIL-REVISED ASPHALT CONCRETE CURB OPTION 2-REVISED BARRIER ON 6:1 SLOPE DETAIL.